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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,656	12/21/2001	Christopher P. Zura	23555-P011US	4464

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EXAMINER

SHAPIRO, JEFFERY A

ART UNIT PAPER NUMBER

3653

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/036,656

Applicant(s)

ZURA ET AL.

Examiner

Jeffrey A. Shapiro

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/22/05 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finley et al (US 6,442,448 B1) in view of Zinsmeyer (US 5,018,645). Finley et al discloses an intermediary module (630, 640 and 650) adapted to be coupled to a fuel dispenser, a dispenser controller (SM300), a display and control module (SM300), and an intermediary module (630, 640 and 650) responsive to dispenser control signals transmitted from said dispenser controller (SM300) to process said control signals in accordance with programming provided by said display and control module and to transmit said processed control signals to said fuel dispenser. Multimedia content is

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communicated through hypertext transfer protocol (HTTP) enabling users to browse hypertext markup language (HTML) to “match advertising and home computer based browsing experiences..” See Finley, col. 7, lines 1-10 and 35-49. These home computer based browsing experiences are construed as including multimedia based content.

Finley et al does not expressly disclose, but Zinsmeyer discloses a user interface (4), coupled to said display (5) and control device (15, 40, 42 or 45) for allowing a user to specify that an additive is to be dispensed with fuel dispensed by said dispenser, whereby the additive is added to a fuel stream substantially simultaneously. See further, Zinsmeyer (figures 1-4), col. 6, lines 25-34 and col. 8, line 3-col. 9, line10. Note that control (40) is construed as a pump controller. Controllers (15, 42 and 45) are also construed as pump controllers as they are linked to control (40) and provide controlling input to this base controller. See also col. 7, lines 38-58 which states that the controller (40) controls the operation of pumps (31 and 36).

Finley et al and Zinsmeyer are analogous art as they concern vending items in a fuel dispensing environment.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have provided appropriate additive holding tanks, pumps and a customer interface on the fuel dispensers of Finley et al in order to enable a customer to choose an additive to be dispensed simultaneously with the fuel to be dispensed by the dispenser.

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The suggestion/motivation for including additive dispensing and interface to Finley's fuel dispensing system would have been to provide fuel additives which to a fuel customer at a fuel pump which will help improve engine performance. See col. 1, lines 5-51 of Zinsmeyer.

4. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christman et al (US 6,390,151 B1) in view of Zinsmeyer (US 5,018,645), further in view of Brown (US 5,771,278), further in view of Kolls (US 6,643,623 B1) and still further in view of Finley.

As described in Claim 1, Christman et al discloses a fuel dispenser (14 and 38) for pumping fuel in response to dispenser control signals applied thereto and a pump controller (20) for generating said dispenser control signals, said pump controller having a communications interface adapted to receive transaction signals from said fuel dispenser and to transmit said dispenser control signals from said pump controller to said dispenser. See Christman, col. 14, lines 45-67, noting that connection (48) has a two-way arrow indicating signals passing both ways between the fuel dispenser and the pump controller.

Christman further discloses an intermediary module coupled to said communications interface and to said dispenser, said intermediary module adapted to intercept said transaction signals and said dispenser control signals. Note that Christman, col. 14, lines 58-63 indicate the existence of signal processing devices such

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as encoders/decoders, modems, and interface modules, which can be construed as "intermediary modules".

Christman further discloses a display and control module (30), coupled to said intermediary module. Note that col. 14, lines 28-34 indicate that the device (30) can be either mounted in a vehicle or mounted on the dispenser itself. At the very least, it would have been obvious to one ordinarily skilled in the art to allow a communication device to be either mobile in the vehicle or affixed to the dispenser itself, or both, so as to increase the amount of sales by accommodating those who may not have a mobile device in their vehicle. Col. 20, lines 38-50, indicates that a display device may be mounted directly onto the dispenser, noting that for a display to be mounted to the dispenser, it would be obvious to those ordinarily skilled in the art to also add the necessary display cards and controllers.

Christman further discloses a display, coupled to said display and control module, for displaying multimedia content. See col. 20, lines 1-30 and col. 18, lines 18-35, noting that video as well as voice and text are carried and displayed on the displays of Christman et al. Christman further discloses that said intermediary module transmits at least one transaction signal from said fuel dispenser to said communications interface and to said display and control module. See col. 7, lines 66 and 67 and col. 8, line and col. 7, lines 22-67 and col. 8, lines 1-16.

As described in Claims 2-4, Christman discloses that an intermediary module modifies at least one dispenser control signal received from said communications interface and transmits said modified dispenser control signal to said fuel dispenser,

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modifies at least one transaction signal from said fuel dispenser and transmits said modified transaction signal to said communications interface and that the display control module generates control signals to control said intermediary device to generate dispenser control signals and apply said dispenser control signals to said fuel dispenser. See, the modem, encoder, decoder, and other circuitry- cryptography electronics in figure 4a of Christman, which would have been used by those ordinarily skilled in the art to condition/modify the signals from the communications interface to the dispenser.

Christman further discloses, as described in Claim 5, a server (42), coupled to said display and control module by a communications link (40)—see figure 2.

Christman further discloses, as described in Claim 6, that said communications link to the server is a wireless communications link. See col. 16, lines 8-12.

Christman discloses, as described in Claims 7 and 8, that said server transmits multimedia content to said display and control module via said communications link. See col. 14, lines 14-35 and col. 18, lines 18-35, which describes JPEG encoded video and voice transmissions and communication.

As described in Claim 10, Christman et al does not expressly disclose, but Zinsmeyer discloses a user interface (4), coupled to said display (5) and control device (15, 40, 42 or 45) for allowing a user to specify that an additive is to be dispensed with fuel dispensed by said dispenser, whereby the additive is added to a fuel stream substantially simultaneously. See further, Zinsmeyer (figures 1-4), col. 6, lines 25-34 and col. 8, line 3-col. 9, line10. Note that control (40) is construed as a pump controller.

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Controllers (15, 42 and 45) are also construed as pump controllers as they are linked to control (40) and provide controlling input to this base controller. See also col. 7, lines 38-58 which states that the controller (40) controls the operation of pumps (31 and 36).

As described in Claim 10, Christman et al does not expressly disclose, but Brown discloses the following that said intermediary module (210) has a data processing component (211) and a signal converting component (213). See Brown, col. 11, lines 15-26 and figure 4a. Note particularly, col. 11, lines 24-27, which indicate that both components (210) and (211) can be formed as a single circuit.

As described in Claim 10, Christman et al does not expressly disclose, but Kolls discloses the use of protocols in an information system used in a fuel pump point of sale system and for use in a fuel pump to communicate with the rest of the system. . See abstract of Kolls, which states that fuel pumps are connected to each other and points of sale by a network, and col. 25, lines 29-31, stating that "all data communications are in accordance with established network protocol programming." See also col. 18, lines 49-67 and col. 19, lines 1-14, stating TCP/IP protocol is used.

As described in Claim 10, Christman et al does not expressly disclose, but Finley discloses adapting fuel dispensing upgrade equipment for use with existing fuel dispensing equipment by including emulation circuitry and software for protocol translation of data signals. See Finley, col. 12, lines 35-col. 13, line 35.

Christman et al, Finley and Zinsmeyer are analogous art as they concern vending items in a fuel dispensing environment.

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Christman et al and Brown are analogous art because Christman discloses use of a modulator/demodulator in controller (20) and Brown discloses details of such a device. See Christman, col. 14, lines 55-63. Brown discloses details of a modem, as is well-known in the art, which has a data processing and signal converting component. See previous citations.

Christman et al and Kolls are analogous art because they both concern electronic control and communication in a fuel pump environment.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have provided appropriate additive holding tanks, pumps and a customer interface on the fuel dispensers of Finley et al in order to enable a customer to choose an additive to be dispensed simultaneously with the fuel to be dispensed by the dispenser.

The suggestion/motivation for including additive dispensing and interface to Finley's fuel dispensing system would have been to provide fuel additives which to a fuel customer at a fuel pump which will help improve engine performance. See col. 1, lines 5-51 of Zinsmeyer.

It would also have been obvious to provide Christman's system with a dedicated controller (20) which has a modem having both a data processing and signal converting components. See Brown col. 11, lines 15-27.

The suggestion/motivation would have been that modems, in order to work, require both a data processor and a signal converter, such as an analogue to digital converter.

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It also would have been obvious to one of ordinary skill to use a protocol to effect communications between customers at a fuel pump and remote entities through an internet connection or to cause the fuel pump to communicate with other parts of the control system. See abstract of Kolls, which states that fuel pumps are connected to each other and points of sale by a network, and col. 25, lines 29-31, stating that "all data communications are in accordance with established network protocol programming." See also col. 18, lines 49-67 and col. 19, lines 1-14, stating TCP/IP protocol is used.

The suggestion/motivation for using a protocol would have been because one ordinarily skilled in the art would recognize that the control system of Christman, which includes "internet type communications networks", must be operated with a protocol to allow divergent parts of the system to communicate with each other. See Christman, col. 14, lines 5-67, particularly lines 55-63 and col. 15, lines 22-67, particularly lines 58-65.

Finally, it would have been obvious to adapt Christman's system upgrade with a dedicated controller (20) able to handle data processing and signal converting of data from various proprietary protocols to a data signal in a single protocol. See Finley, col. 12, lines 35-col. 13, line 35.

The suggestion/motivation would have been to adapt the upgrade equipment to handle any of the various proprietary dispenser equipment protocols used in the industry. See Finley, col. 12, lines 35-45.

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5. Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christman et al (US 6,390,151 B1) in view of Zinsmeyer (US 5,018,645), further in view of Brown (US 5,771,278), further in view of Kolls (US 6,643,623 B1) and still further in view of Finley.

The following claims are rejected using Christman, with an alternative interpretation, whereby the "vehicle communications device" is the intermediary module.

Christman discloses, as described in Claim 10, an intermediary module (30 or 52) adapted to be coupled to a fuel dispenser, a dispenser controller (20), and a display and control module. See col. 20, lines 38-50. Christman further discloses that said intermediary module (30) is responsive to dispenser control signals transmitted from said dispenser controller (20) to process said control signals in accordance with programming provided by said display and control module and to transmit said processed control signals to said fuel dispenser. Note, for example, that the dispenser controller sends control signals to and from the programmable dispensing valve display, but that the signals sent to and from the dispenser by the vehicle communications device affect the dispenser controller and its functions. Note also that the intermediary module can also be construed to include the controller (20), and that even the entire dispenser system may be considered an intermediary module with respect to the server (42) and the other remote portions of the system.

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Christman further discloses, as described in Claim 11, that said intermediary module is responsive to transaction signals transmitted from said fuel dispenser to process said transaction signals in accordance with programming provided by said display and control module and to transmit said processed control signals to said dispenser controller. See figure 3, noting that "refueling request info", "commercial transaction" and "operator communications" signals are sent to and from the RF transceiver (54) of the dispenser.

Christman further discloses, as described in Claim 12, that said intermediary module is responsive to control signals from said display and control module to generate dispenser control signals to be applied to said fuel dispenser. See Christman, figure 3.

Christman further discloses, as described in Claim 13, that said intermediary module is responsive to control signals from said display and control module to generate transaction signals to be transmitted to said dispenser controller. See figure 3.

As described in Claim 10, Christman et al does not expressly disclose, but Zinsmeyer discloses a user interface (4), coupled to said display (5) and control device (15, 40, 42 or 45) for allowing a user to specify that an additive is to be dispensed with fuel dispensed by said dispenser, whereby the additive is added to a fuel stream substantially simultaneously. See further, Zinsmeyer (figures 1-4), col. 6, lines 25-34 and col. 8, line 3-col. 9, line 10. Note that control (40) is construed as a pump controller. Controllers (15, 42 and 45) are also construed as pump controllers as they are linked to

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The suggestion/motivation would have been to adapt the upgrade equipment to handle any of the various proprietary dispenser equipment protocols used in the industry. See Finley, col. 12, lines 35-45.

Response to Arguments

6. Applicant's arguments with respect to Claims 1-13 have been considered but are moot in view of the new ground(s) of rejection. See above discussions incorporating newly cited Zinsmeyer '645.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey A. Shapiro whose telephone number is (571)272-6943. The examiner can normally be reached on Monday-Friday, 9:00 AM-5:00 PM.

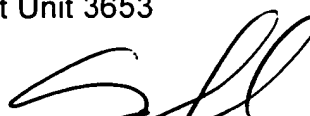
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald P. Walsh can be reached on (571)272-6944. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jeffrey A. Shapiro
Examiner
Art Unit 3653

January 4, 2006



GENE O. CRAWFORD
SUPERVISORY PATENT EXAMINER